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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,530	08/04/2000	J. Richard Spears	DYNX.0002	1489
27405	7590	06/02/2004	EXAMINER	
THEROX, INC. 2400 MICHELSON DRIVE IRVINE, CA 92612			BARRY, CHESTER T	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/632,530

Applicant(s)

SPEARS ET AL

Examiner

Chester T. Barry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-48 and 63-79 is/are pending in the application.
- 4a) Of the above claim(s) 2-29, 31-37, 42-48 and 70-75 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 78 is/are allowed.
- 6) ☒ Claim(s) 1, 30, 38-41, 63-69, 76, 77 and 79 is/are rejected.
- 7) ☒ Claim(s) 39, 41, 66-69 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Applicants election without traverse is noted with appreciation.

Claims 1, 30, 38-41, 63-69,<sup>1</sup> 76-79 are pending and not withdrawn from consideration.<sup>2</sup>

Claims 1, 30, 38, 63 – 64, 76-77 are rejected under Sec. 102(b) as anticipated by FAST.

Claim 1 reads as follows:

Claim 1 (currently amended): An apparatus for treating a wastewater comprising:  
a gas-enrichment assembly adapted to receive the wastewater and a treatment gas, wherein the gas-enrichment assembly is configured to generate a gas-enriched fluid; and  
a delivery assembly coupled to the gas-enrichment assembly for receiving the gas-enriched fluid from the gas-enrichment assembly and in a fluid communication with the wastewater, the delivery assembly expelling the gas-enriched fluid in a substantially bubble-free manner into the wastewater and capable of raising the concentration of the treatment gas in the wastewater to hyperbaric levels.

USP 3956124 to FAST describes an apparatus for treating a natural body of water, e.g., pond or lake, comprising inter alia a gas-enrichment assembly in which water drawn from the body of water through conduit 15 is enriched with oxygen under pressure. The apparatus also comprises a delivery assembly 28 which receives the oxygen-enriched water. The delivery assembly 28 is in fluid communication with the wastewater to be treated, i.e., hypolimnion layer 14. Per claim 30, the delivery assembly comprises a conduit 28 and nozzles ("small spaced orifices 30"). Per claim 38, each such orifice is a capillary. The delivery assembly expels the oxygen-enriched water in a substantially

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<sup>1</sup> Contrary to applicants' representation, claims 49 – 62 were cancelled, so they are not pending.

<sup>2</sup> Applicant stated on 3/12/04 that claims 2 – 29, 31-37, 42-48, 70-75 are withdrawn from consideration.

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bubble-free manner into the wastewater.<sup>3</sup> Insofar as the hydrostatic head of the body of water raises the pressure of the water at the point at which delivery assembly 28 discharges the gas-enriched water into the pond or lake above that of ambient pressure, the apparatus is capable of raising the concentration of the oxygen in the wastewater to hyperbaric levels. Per claims 64-65, the means by which the apparatus of FAST is mounted to the ground meets the stationary "mounting assembly" limitation.

Objection is made to Claims 39, 41, 66 -69 as dependent on a rejected base claim, but would be allowed if presented in independent form.

One, but not both, of claims 40 and 79 would be allowable if amended to overcome the following Sec. 112 rejection.

Claims 40 and 79 are rejected under Sec. 112, second paragraph, because we presume a difference in scope exists between claims in the same application, but no such distinction could be found, and applicants have asserted that claim 79 is the same scope as claim 40.

Objection is made to claim 69 for recitation of "comprises a at least one cart" where simply "comprises at least one cart" is preferred.

Claim 78 is allowed.

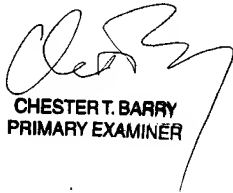
  
**CHESTERT T. BARRY**  
**PRIMARY EXAMINER**

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<sup>3</sup> FAST teaches that the water is enriched with oxygen but not to such an extent that the enriched stream would be

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571-272-1152



**CHESTER T. BARRY**  
**PRIMARY EXAMINER**

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supersaturated upon return to the hyperlimnion.